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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/492,300	01/27/2000	Toshitaka Agano	Q55891	9715

7590 10/03/2003

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2100 Pennsylvania Avenue N W
Washington, DC 20037

EXAMINER

NGUYEN, JENNIFER T

ART UNIT	PAPER NUMBER
2674	

DATE MAILED: 10/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/492,300

Applicant(s)

AGANO, TOSHITAKA

Examiner

Jennifer T Nguyen

Art Unit

2674

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 January 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

1. This Office Action is responsive to Amendment filed on 07/22/2003.
2. The indicated allowability of claims 14-17 are withdrawn in view of the newly discovered reference(s) to Zhang (U.S Patent No. 6,151,008) and Callway (U.S Patent No. 6,184,861). Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-5 and 7-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Callway (U.S. Patent No. 6,184,861).

Regarding claims 1 and 7, referring to Fig. 1, Callway teaches at least two sets of maximum luminance including an image maximum luminance (i.e., first intensity) for displaying an image (i.e., video data) and an ordinary maximum luminance (i.e., second intensity) for display non-image information (i.e., simple text) said ordinary maximum luminance being lower than said image maximum luminance (col. 1, lines 26-51, from col. 2, line 7 to col. 3, line 62).

Regarding claims 2-4, Callway further teaches a luminance adjusting unit (16) which, when the non-image information is displayed in cases of display of only the image, or display of a mixture of the image and the non-image information, or display of only the non-image information, adjusts a brightness of the display in an area of the non-image information or in an

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entire display screen (44) in accordance with said ordinary maximum luminance (col. 1, lines 26-51, from col. 2, line 7 to col. 3, line 62).

Regarding claim 5, Callway also teaches that an entire display screen (48) is adjusted to a brightness of display not higher than said ordinary maximum luminance in accordance with an operation using graphical user interface (col. 2, lines 29-54).

Regarding claims 8 and 9, Callway further teaches the display device (44) wherein the image is displayed at a maximum luminance level for the display represented by m bits and wherein the non-image information is displayed at a maximum level represented by n bits wherein ($m > n$) (col. 4, lines 3-26).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 6 and 10-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhang (U.S. Patent No. 6,151,008) in view of Callway (U.S. Patent No. 6,184,861).

Regarding claim 6, referring to Figs. 1 and 2, Zhang teaches a display device (12) wherein adjustment of a brightness of display (12) in relation to an ordinary maximum luminance (i.e., low brightness level) and a maximum luminance (i.e., high brightness level) is performed by adjustment of a light source (18, 20) for display (12) (see abstract, col. 4, lines 16-64).

Zhang differs from claim 6 in that he does not specifically teach two sets of maximum luminance including an image maximum luminance for displaying an image and an ordinary maximum luminance for display non-image information. However, Callway teaches at least two sets of maximum luminance including an image maximum luminance (i.e., first intensity) for displaying an image (i.e., video data) and an ordinary maximum luminance (i.e., second intensity) for display non-image information (i.e., simple text) (col. 1, lines 26-51, from col. 2, line 7 to col. 3, line 62). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the two sets of maximum luminance including an image maximum luminance for displaying an image and an ordinary maximum luminance for display non-image information as taught by Callway in the system of Zhang in order to improve the image display and avoid any stress on the viewer's eyes.

Regarding claim 10, the combination of Zhang and Callway further teaches adjustment of brightness of display in relation to said ordinary maximum luminance and said image maximum luminance is performed by adjustment of light source for display (col. 4, lines 32-64 of Zhang).

Regarding claim 11, the combination of Zhang and Callway further teaches adjustment of the light source (18, 20) comprises increasing or decreasing current through the light source (col. 4, lines 32-64 of Zhang).

Regarding claim 12, Zhang also teaches that the light source comprises multiple light sources (18, 20) (col. 4, lines 15-31 of Zhang).

Regarding claim 13, Zhang further teaches a light source control unit which controls current through each of the multiple light sources independently to increase brightness in a region of a display screen or in an entire display screen (col. 4, lines 15-64 of Zhang).

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Regarding claims 14-17, the combination of Zhang and Callway further teaches display device (44) receiving a control signal (34) supplied externally to distinguish image information for display and adjusting brightness of the display based on the control signal (col. 3, lines 3-43 of Callway).

7. Applicant's arguments with respect to claims 1-17 have been considered but are moot in view of the new ground(s) of rejection.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Onitsuka et al. (U.S. Patent number 5,808,597) teaches illumination device for liquid crystal display apparatus.

Lee et al. (U.S. Patent number 5,854,617) teaches circuit and method for controlling a backlight of a LCD in portable computer.

Eglit (U.S. Patent number 5,734,362) teaches brightness control for LCD.

Sawada et al. (Pub. No. US 2003/0001856) teaches image display system and information processing apparatus.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Jennifer T. Nguyen** whose telephone number is **703-305-3225**. The examiner can normally be reached on Mon-Fri from 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Richard A Hjerpe** can be reach at **703-305-4709**.

Any response to this action should be mailed to:

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Commissioner of Patents and Trademarks

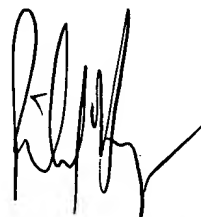
Washington, DC. 20231

Or faxed to: 703-872-9306 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, sixth-floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is 703-306-0377.

Jennifer T. Nguyen
9/29/2003



RICHARD HJERPE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600